



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILED DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,205	02/26/2002	Lawrence Zupon	15-841	5684
7590	12/19/2003			
WATTS, HOFFMANN, FISHER & HEINKE CO., L.P.A. P.O. Box 99839 Cleveland, OH 44199-0839			EXAMINER	
			RUDDOCK, ULA CORINNA	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 12/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/083,205	ZUPON ET AL.
	Examiner	Art Unit
	Ula C Ruddock	1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 11 September 2003.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 9-13 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-8 and 14-25 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

### **DETAILED ACTION**

1. The Examiner has carefully considered Applicant's amendment and accompanying remarks filed September 11, 2003. The 112/2<sup>nd</sup> paragraph rejections have been overcome.
2. It should be noted that the Examiner mistakenly failed to include claim 7 in the rejection of Paragraph #11 of Paper #3. As a result, the present rejection will be a non-final rejection.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Information Disclosure Statement***

4. The information disclosure statement filed May 10, 2002, has been considered. However, two of the cited documents, specifically, document #1, 5, and 7 have no date. Applicant is asked to supply an approximate date (the year will suffice) for these documents. Otherwise, they will not be considered. ***It should be noted that a specific year is required in order for these references to be considered.***

#### ***Claim Rejections - 35 USC § 103***

5. Claims 1- 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaupre (US 4,310,587) in view of Ward et al. (US 4,736,552). Beaupre disclose a vapor barrier sheet that is useful for insulation (abstract). The insulation comprises a fiberglass batting and the vapor barrier sheet has a substrate sheet that is metallized with thin layers of aluminum (col 2, ln 53-59). Adhesives are used to bond the batting to the barrier sheet; these adhesives include hot melt adhesives (col 2, ln 64-68). Beaupre discloses the claimed invention except for the teaching of a vapor retarder material.

Ward et al. (US 4,736,552) disclose a roof insulation system having a vapor barrier comprising an impervious polypropylene-scrim-kraft paper material (col 4, ln 28-31). It would have been obvious to have used Ward's vapor barrier along with the insulation material and vapor barrier sheet of Beaupre, motivated by the desire to create an insulation material with a high level of tensile strength and resistance to tear.

With regard to claim 5, it should be noted that optimizing the thickness of layers is a result effective variable. For example, the thickness of a layer directly affects the strength and durability of the laminate. Therefore, it would have been obvious to have made the polypropylene in the insulation of Beaupre and Ward et al. have a thickness of 0.0015 inches, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have made the polypropylene 0.0015 inches thick, motivated by the desire to create a vapor barrier sheet with increased strength and resistance to tear.

6. Claims 7, 8, and 16-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaupre (US 4,310,587) in view of Ward et al. (US 4,736,552) and Denenberg (US 3,097,124). Beaupre disclose a vapor barrier sheet that is useful for insulation (abstract). The insulation comprises a fiberglass batting and the vapor barrier sheet has a substrate sheet that is metallized with thin layers of aluminum (col 2, ln 53-59). Adhesives are used to bond the batting to the barrier sheet; these adhesives include hot melt adhesives (col 2, ln 64-68). Beaupre discloses the claimed invention except for the teaching of a vapor retarder material.

Ward et al. (US 4,736,552) disclose a roof insulation system having a vapor barrier comprising an impervious polypropylene-scrim-kraft paper material (col 4, ln 28-31). It would have been obvious to have used Ward's vapor barrier along with the insulation material and vapor barrier sheet of Beaupre, motivated by the desire to create an insulation material with a high level of tensile strength and resistance to tear.

Beaupre and Ward et al. disclose the claimed invention but fail to teach that the aluminum is perforated. Denenberg (US 3,097,124) disclose an insulating wallboard having an aluminum outer layer that has holes, i.e. perforated (col 2, ln 41-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used Deneberg's method of perforating on the aluminum in the insulation material of Beaupre and Ward et al. motivated by the desire to create an insulation material that prevents undue moisture condensation and permits sufficient, though small, air circulation.

Although Beaupre, Ward et al., and Denenberg do not teach the newly added limitation of a reflective layer reflecting approximately 97% of the radiated heat, it is reasonable to presume that this property is inherent to the insulation material of Beaupre, Ward et al., and Denenberg. Support for said presumption is found in the use of like materials (i.e. perforated aluminum). The burden is upon Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In addition, the presently claimed property of a reflective layer reflecting approximately 97% of the radiated heat would obviously have been present once the insulation of Beaupre, Ward et al., and Denenberg is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

***Response to Arguments***

7. Applicant's arguments filed September 11, 2003, have been fully considered but they are not persuasive for the reasons set forth. Applicant argues that neither the Ward et al. nor Beaupre references include a first and second deposit of hot melt glue in direct contact with the layer of fiberglass. This argument is not persuasive because the claims as written do not preclude the use of other layers in the laminate. Because the claims are written in open language (i.e. comprising) other layers can be present. Applicant also argues that the Ward et al. does not disclose the use of hot melt glue or a vapor retarder material. This argument is not persuasive because Ward does disclose a vapor retarder system (col 4, ln 28-31) comprising an impervious polypropylene-scrim-kraft paper material. Furthermore, Ward et al. was not used for its teaching of hot melt glue, the Beaupre reference discloses the hot melt glue in the laminate (col 2, ln 66-68).

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C Ruddock whose telephone number is 703-305-0066. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

*UCR*  
UCR

**Ula C. Ruddock**  
Primary Examiner  
Tech Center 1700